

Musculista senhousia (Benson, 1842); a mussel recently introduced into the Swan River estuary, Western Australia. (Mollusca: Mytilidae)

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Abstract

Introduction of the east Asian bag mussel *Musculista senhousia* to the Swan River estuary in 1982 is reported. A description of its subsequent spread in the estuary and some preliminary comments on its ecology are given.

Introduction

The fauna of the Swan River estuary and adjacent coastal water is well documented and represented in the collections of the Western Australian Museum. The benthic invertebrates of the estuary, particularly the molluscs, were examined by Chalmer *et al.* (1976) and a summary of this work and of previous studies on the fauna of the Swan and other Western Australian estuaries and embayments was compiled by Hodgkin and Majer (1976).

Extension of the geographic range of the mactrid bivalve *Spisula* (*Notospisula*) *trigonella* (Lamarck, 1819) into the Swan estuary in about 1964 was documented by Wilson and Kendrick (1968). The nassariid gastropod *Nassarius* (*Plicarcularia*) *burchardi* (Dunker, 1849) exhibited a similar extension of range from the southern Australian coast, this having been first recorded in 1965. The east Asian semelid bivalve *Theora* (*Endopleura*) *lubrica* Gould, 1861 arrived in Cockburn Sound in about 1971 and in the estuary in about 1973, almost coincidentally with its arrival in California and New Zealand. These last three species still form a significant part of the molluscan biota of the estuary.

The most recent arrival of an exotic molluscan species into the estuary appears to be the bag mussel *Musculista senhousia* (Benson, 1842). Its presence was first recognized when large specimens of about 2.5 cm in length were collected by one of us (A.B.) in 1983 at Chidley Point, Middle Estuary (terminology of Chalmer *et al.* 1976, see Figure 1). Examination of Western Australian Museum records revealed that two very small juveniles had been taken during benthic surveys carried out by the Western Australian Department of Fisheries in February and May, 1982 in Melville Water, Middle Estuary. However these had, at that time,

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